

Amendments to the Claims:

1. (Previously Presented) A control system for the compressor of a vehicle air braking system, the control system having one or more inputs indicative of a vehicle operating state, and an output for determining whether a compressor is on-load or off-load, the system further including target means to calculate in real time, a target pressure for a reservoir downstream of said compressor, said output being responsive to said target means, wherein the target pressure changes within at least one of the throttle-off and the throttle-on modes, and is higher during throttle-off modes than throttle-on modes.
2. (Original) A control system as claimed in claim 1 wherein a control system input is the vehicle throttle position.
3. (Canceled)
4. (Previously Presented) A control system according to claim 2 wherein the higher target pressure exceeds a normal target pressure by 8-10%.
5. (Original) A control system according to claim 4 and further including a third yet higher target pressure.
6. (Original) A control system as claimed in claim 1 wherein a control system input is the temperature at the compressor outlet.
7. (Original) A control system as claimed in claim 6 wherein said target pressure is reduced in response to elevated compressor outlet temperature.
8. (Currently Amended) A control system for the compressor of a vehicle air braking system, the control system calculating a target pressure in real time, and the compressor being capable of being taken off load at a predetermined target pressure, wherein the control system has an input indicative of vehicle throttle position and is adapted to increase said target pressure at a zero throttle opening state, and change the target pressure during within the zero throttle opening state.
9. (Previously Presented) A control system for the compressor of a vehicle air braking system, the control system having a first input for indicating vehicle engine speed, a second input for indicating vehicle speed, a third input for indicating vehicle throttle opening, a fourth input for

indicating air pressure in a reservoir downstream of the compressor, and an output for determining whether a compressor is on-load or off-load, the system further including means to calculate a target pressure for said reservoir in real time, the target pressure changing within at least one of the throttle-off and the throttle-on modes, and being higher during throttle-off modes than during throttle-on modes.

10. (Original) A control system according to claim 9 wherein the higher target pressure exceeds the normal target pressure by 8-10%.

11. (Original) A control system according to claim 10 and further including a third yet higher target pressure.

12. (Previously Presented) A control system according to claim 1 and adapted to provide independent control of said compressor and a purge valve therefor.

13. (Previously Presented) A method of controlling a compressor of a vehicle air braking system, the method comprising the steps of:

providing a control system for the compressor having one or more inputs indicative of a vehicle operating state,

providing an output from the control system to place the compressor either on-load or off-load depending upon said vehicle operating state,

providing target means to calculate in real time a target pressure for a reservoir downstream of said compressor, wherein said output from the control system is responsive to said target means, wherein the target pressure changes within at least one of the throttle-off and the throttle-on modes, and is higher during throttle-off modes than throttle-on modes.